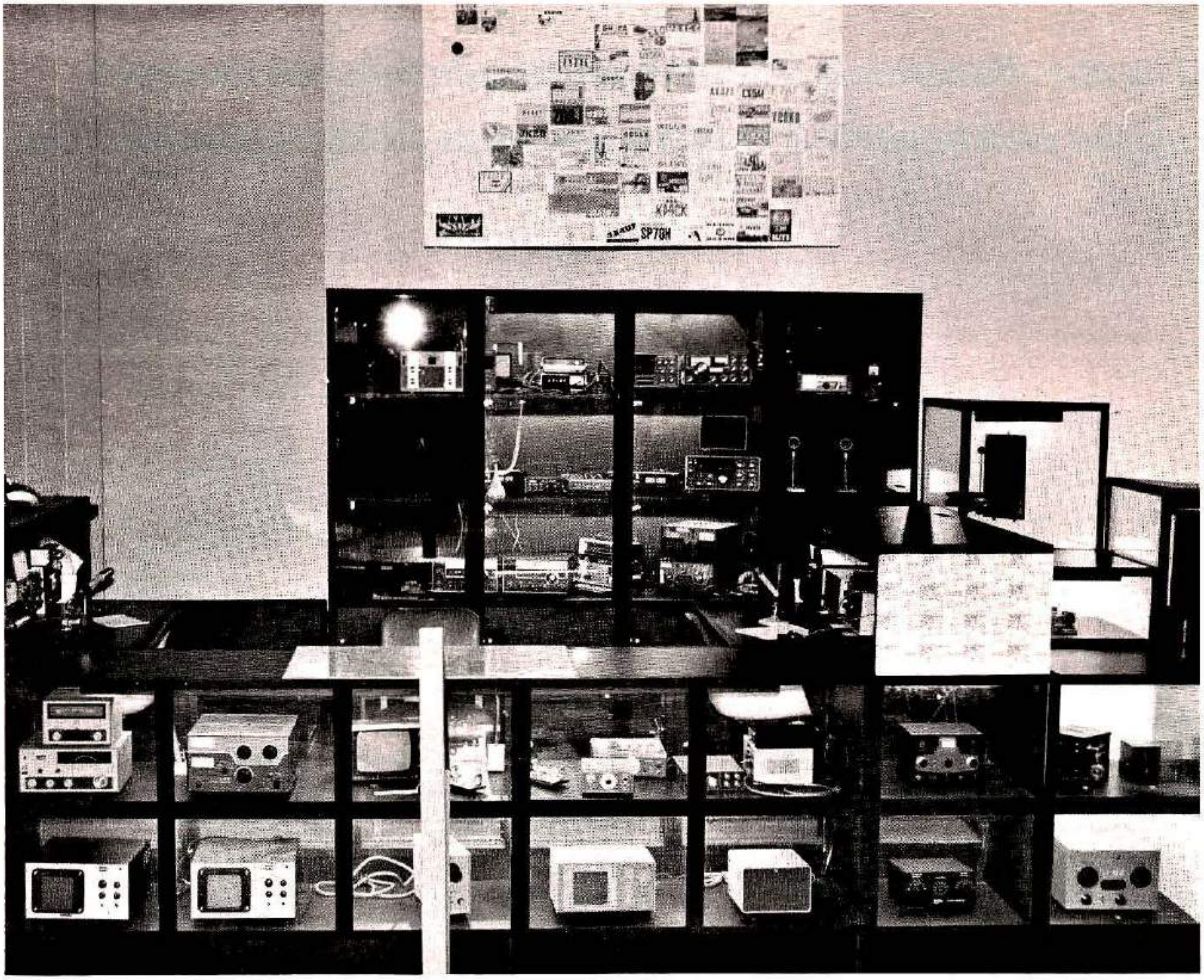


AMATEUR RADIO STATION NN3SI *CALLING*

BY JOE FINCUTTER, W3IK

The Smithsonian Institution's *Nation of Nations* exhibition in its Museum of History and Technology was not only a significant bicentennial display for 1976, but was intended as a sight to see for at least several more years. This exhibition covers the entire west end of the second floor of the building. The main theme of the exhibition is to depict that the United States is a Nation of Peoples who emigrated to North America from the many nations of the world, seeking a new life and a new life style. This new life style is a mixture of the many cultures these people brought with them and is a distinctive influence on the modern-day world.

The *Nation of Nations* exhibition is divided into four sections, suitably marked as you wander through the displays. These sections are:

1. People for a New Nation.
2. Old Ways in a New World.
3. Shared Experiences.
4. A Nation Among Nations.

Although the last section is the location of amateur station NN3SI, I highly recommend a visit to the Smithsonian and the Nation of Nations exhibit. This last section typifies the role the United States plays in the world as an exporter and importer through its mass production, mass consumption and mass communications.

Where does amateur radio fit into this exhibit? Well, since the basic theme of the exhibit indicates that the United States is a "Nation of Peoples" from all nations, and since radio amateurs talk to all nations of the world, it's logical to have an amateur radio station as part of the exhibit. The station operators do their best to talk to all nations of the world.

The amateur station has rug-covered stairs directly in front of the exhibit, which is a fine place for the leg-weary to sit and rest while amateur radio is explained and demonstrated.

Station NN3SI

Let's get down to the real purpose of this article, amateur station NN3SI. The *Nation of Nations* exhibit was opened to the public on the evening of June 8, 1976. The first transmission of NN3SI (which was the special callsign assigned by the FCC to the Smithsonian Amateur Radio Club — Vic Clark, W4KFC, trustee) was made at 2130 (9:30 PM local time).

I was fortunate enough to be the chief operator that evening. The official opening ceremonies consisted of transmissions by Harry Dannals, W2HD, president of ARRL; S. Dillon Ripley, secretary of the Smithsonian Institution; and Vic Clark, W4KFC, first vice president of ARRL.

The first QSO, although in the form of an Official Bulletin, was with VE3JW, W1AW, and W2AN. Vic Clark transmitted a short poem by Walt Whitman that depicted the theme of the exhibit. He used a straight key that was once used by David Sarnoff (RCA) when communicating with the *Carpathia* on April 15, 1915, to obtain detailed information about the survivors of the sunken liner, *Titanic*.

Once the official ceremonies were over and we had loggers ready, it was

QRZ NN3SI? — 3865 kHz

What a pileup! But it was fun! We did our best to work those we heard until sign-off time. I know we missed many callers, but I must say that the decorum of all the operators calling was *excellent*! I'm sure that most of them knew what it must have sounded like at NN3SI and they were compassionate.

Station features

One very nice feature of amateur station NN3SI is that it's open to the public and not behind a glass enclosure. The flat portion of the display case between the two operating consoles (see photo) is about chest high for the average adult. This allows the public close access to operating equipment and the operators. The display also serves as a storage area for equipment not in use.

Antennas

Nine antennas are installed on top of the building (six floors above ground). The coaxial cables from the station to the antennas are more than 200 feet (61m) long. The antennas include a 20/40 meter beam, two verticals, a log periodic for 10, 15, and 20 meters, and beams for 2-meter and OSCAR communications. Also included are dipoles for 80 and 40, and the 11.7 meter swl band.

Each antenna is terminated on a patch panel in a cabinet under the back display case. Each console can be connected to any antenna by three coaxial patch cables. Normally the 40- and 11.7-meter dipoles and one vertical are used for the shortwave listening post, leaving the other antennas for use in the two consoles at the operator's discretion.

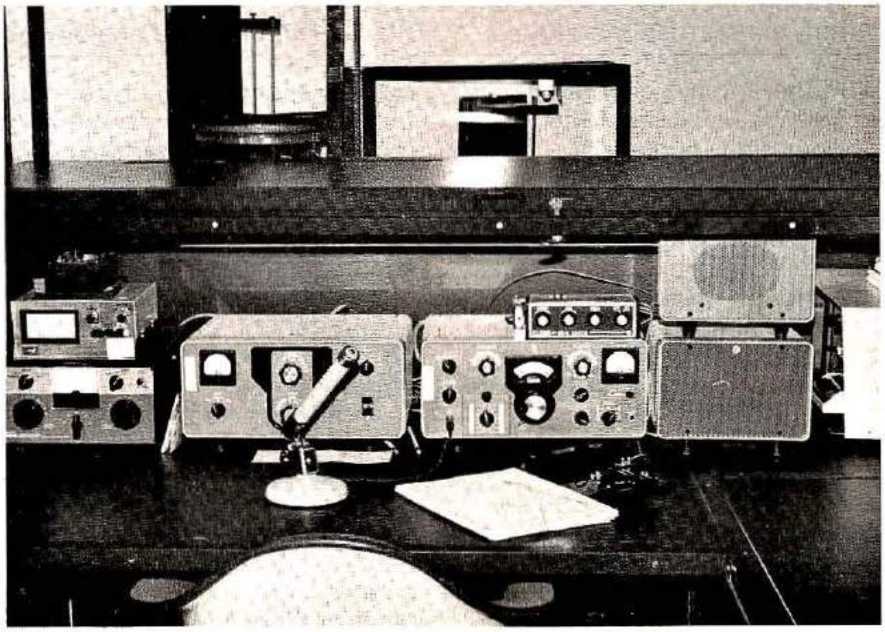
With the equipment available and the frequencies that can be used, the majority of operation has been on the 20- and 15-meter bands. In keeping with the theme "talking with the nations of the world," DXing has been mostly on 20 and 15 meters.

We've done considerable work on 10, 40, and 75 meters; some on 2-meter fm; and the equipment has been set up several times for OSCAR. RTTY and SSTV will be set up and operated during the summer months. At present there's no set schedule for times and frequencies, but the museum is open from 10 AM to 9 PM in the summer months. For the most part, operators are available during that time.

QSLs

Although the QSL cards displayed on the board above the exhibit indicate some good DX contacts, these cards were already there the night the station first was operated. The displayed QSL cards were donated by ARRL and the Smithsonian's Division of Electricity. The station's own card collection, now representing well over *100 countries*, will be added with the addition

One of the two operating consoles of NN3SI showing the amateur radio equipment in use.



of special drop-down panels.

The NN3SI QSL card is a commemorative card, and with the special prefix, is a collector's item. So, when you work the station the operator will provide you with details for obtaining a card for the contact.

Visiting operators

The station is staffed by operators through the Smithsonian Associates Volunteer Program and the Smithsonian Amateur Radio Club. Duty operators are W4HU, K3BV, W3STG, W3FYJ, W4KFC, K3KWJ, N3DF, WB3BRF, K3NCB, W4ZM, N8II, WB3FTB, and myself, W3IK. Station managers are K3RJA and WA4CLQ from the Smithsonian staff.

Amateurs who would like to operate as a visiting operator should write to: Smithsonian Institution, Division of Electricity, Room 5025, Museum of History and Technology, Washington, D.C. 20560. Indicate when you will be available and your license class. Each of the duty operators is responsible for the proper operation of the station and assists the visiting operators. I have used WAYLARCS W3CDQ, W3RXJ, WA3IWK, WA3GZT, and K4SHE, and these gals have been a big help.

Present practice is to operate within the restrictions of the class of license you hold and with the original of your license in your possession at the time of operating. Additional operators are being added to keep the station in operation during the normal open hours of the museum.

Although one operator can keep the station in operation, it's better to have two, so that one can converse with the people who stop by to ask questions about amateur radio, or who want to know the difference between shortwave radio, amateur radio, and CB radio. So, really, it takes two operators to keep things going, but three is the ideal number. With three operators, two can keep operating while the third can sit in the middle, so to speak, and field the many questions that come from the visitors. This provides for maximum use of equipment and allows amateurs in the United States and abroad additional opportunities to work NN3SI.

CB and amateur radio

Those of us who have been in amateur radio for some time seem to forget the impact that CB radio has made on the younger people in particular and, to some extent, on older people. It's amazing how many people, when they hear the term "communications" or see a small transceiver, immediately think of CB. Also, they're amazed to find that there's a form of communications *other* than CB. For example: "It sure looks and sounds like CB!" — "Well, that sure looks like the same equipment my friend uses on CB." So we explain amateur radio and the big differences between it and CB radio. How well we've succeeded in explaining both we'll never know, but we deserve an E for effort.

When we ask people if they've ever considered becoming an amateur, a standard answer is, "It costs too much!" or "I can't afford it!" So I've used the analogy of the first car I bought. I didn't order it especially built for me. I bought a used car, worked on it, fixed it, then either sold it or traded up to a better car. I explain that it's the same way with amateur radio: you buy used equipment within the affordable price range, use it within its limitations, and later on trade up to something better.

Another standard answer is, "I could never pass the tests!" So we explain how easy it is to get a Novice license at the present time because of all the training being offered by amateur radio clubs, recreation departments, and schools.

So we stress the beneficial facets of amateur radio and try to show that CB is a means of *communications over short distances*, while amateur radio is a *hobby* with unlimited possibilities for learning about electronics as well as for providing communications around the world.

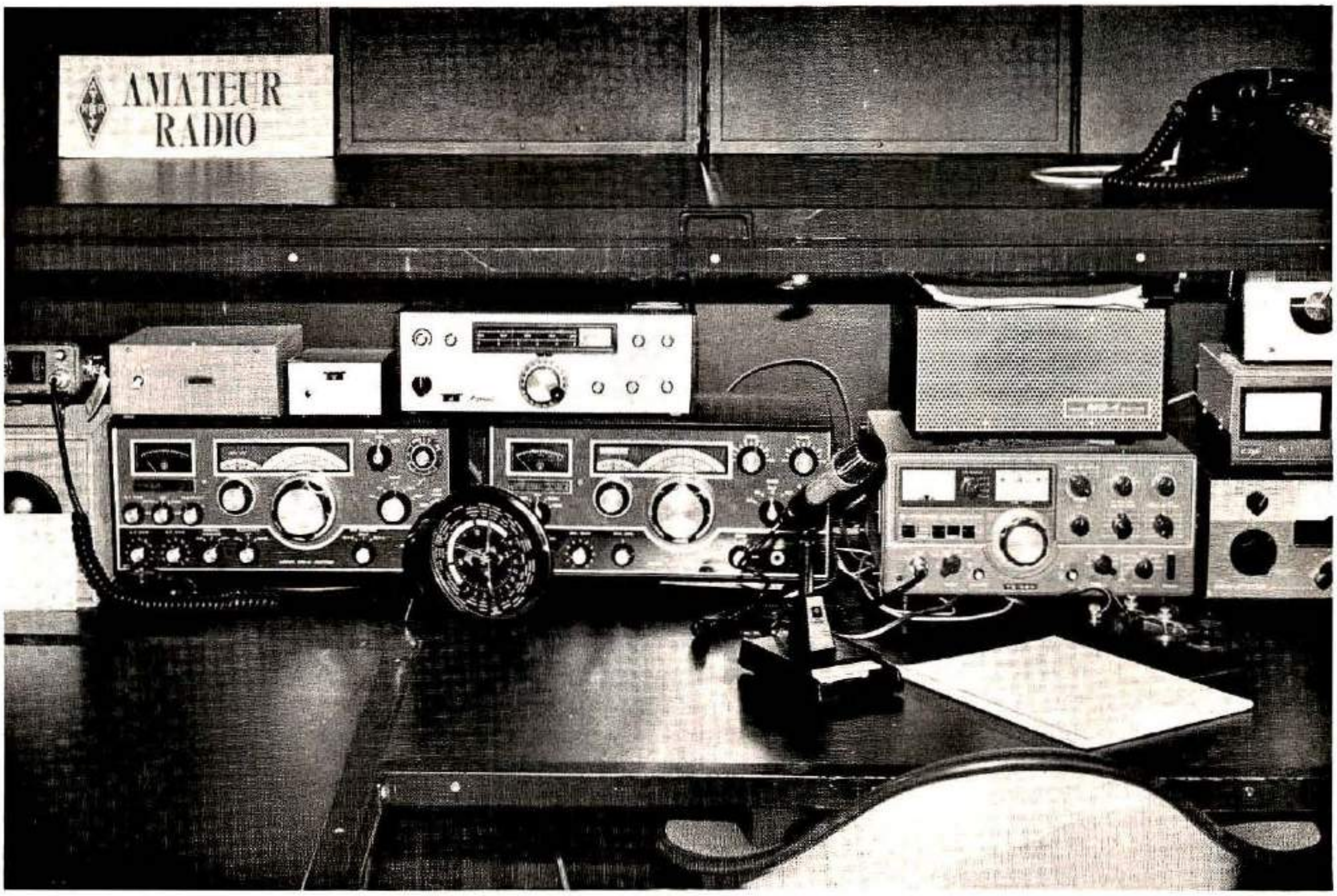
We pass out literature made available by the ARRL. We have people fill out a small card with their name and address, which we forward to ARRL, so that the good word of amateur radio may be passed onto them.

One question that invariably comes up is, "How far can you talk?" and we always answer, "Around the world!" To prove our point, each operator on each day lists the DX stations worked during the day in a log book, so that we can show the inquirers the book and let them peruse the pages to see the countries we've worked. We also have a log of the amateurs from around the world who have visited the station. These include operators from SM5, G3, G8, F3, OA4, F6, J11, LX1, LU3, DL2, HP1, KV4, JR3, PY2, VK5, HC1, SM6, VE1, VK2, 6W8, JY9, PA0, PJ8, SM7, VE5, G4, YN1, PE0, SM0, and VE3.

Amusing incidents

Each of us has, at one time or another, been involved in trying to separate a signal out of a number of other signals. We have one or two fingers on the dial, and our head is cocked at a precarious angle to make sure that the acoustics are exactly right to hear the proper signal. In this position we're absolutely motionless, with a blank stare in our eyes. Or perhaps we're copying Morse code wearing a pair of headphones — not writing down the message, but just looking straight ahead.

Well, this happened to two of us recently. From out in front of the exhibit came a voice which said, "Those are the two most natural looking dummies I've ever seen!" Since I was not working anyone, but was



The second operation position of NN3SI. Many familiar pieces of amateur gear are evident.

looking for a DX station, I immediately stood up, stating that we were indeed alive, but may be *dummies*. A little girl standing there almost jumped out of her shoes — she was sure we were mannequins!

It wasn't until that little incident occurred that we realized NN3SI was the only exhibit that had "live" people in it.

One evening, as I was searching for DX on 20 meters, I heard YO3AC in Romania and was waiting for him to finish his QSO so I could call him. There were several people standing at the station. Along came a young woman, dressed in the latest fashion, with two lady friends. She immediately tried to show her knowledge of radio communications, and was explaining to her two friends how CB worked, and that the operator was a licensed CB operator.

I was just about to correct her knowledge when she asked, "Where is that station?" I informed her that this was an amateur station, and that the station being heard was in Bucharest, Romania. She replied, "Fine, you amateurs can hear Romania; why don't you try for someone else?" I explained that I wanted to talk to this particular station. At that, YO3AC finished with his QSO and I gave him a call; he came right back to the special call but wasn't sure he had it correct. As I was talking to him, the young lady departed the scene, telling her friends that I was operating illegally since CBers were limited to 150 miles (240km). Oh well, you can't win them all!

Shortly after New Year's Day, 1977, I was calling CQ on the low end of 20 meters when a station called me and informed me that I was using an illegal call; he told me that bicentennial calls were not to be used after December 31, 1976, and that I could be cited for using an illegal call. I informed him that NN3SI was a special event call and that it was good for some time to come. I have also been told on several occasions that the call is N3SI because no double-N calls had been issued yet.

Acknowledgements

It's a rewarding experience to operate a special event station such as NN3SI. We've met some wonderful people who are interested in museums and thereby have furthered their education. I've made some new friends and hope I've been able to increase the interests of many in amateur radio as a hobby and to extend friendship through amateur radio.

In particular, I want to acknowledge the help provided to all the operators of NN3SI by Bernard Finn, Elliott Sivowitch, and Ray Hutt — all members of the Smithsonian's Division of Electricity staff.

HRH